

10/771,720

**REMARKS**

This application is rejected under 35 U.S.C. § 112, first paragraph, for the reasons noted in the official action. The inadequate written description rejection is acknowledged and respectfully traversed in view of the following remarks.

Arguably, the term "performance matrix" or an alternative translation from the original German specification, "performance graph" is not directly recited in the detailed description of the application. However, an explanation of the parameters of such a performance matrix were expressly described in the originally filed specification. See paragraph 011, lines 12-15. "Since the speed of the pump impeller wheel is determined, the electronic control unit can determine the torque of the turbine rotor with reference to stored hydrodynamic torque converter values." Also in paragraph 021, lines 15-19, the specification recites,

...and the signals giving the speed of the turbine rotor 7 and the speed of the pump impeller wheel 2 are passed on to an electronic control unit (not shown) in which characteristic hydrodynamic torque converter values are stored and which can determine the torque of the turbine rotor with reference to those values.

It is at the very least inherent in an electronic control systems that predetermined characteristic values of a dynamic device, for example the performance characteristic values of a hydrodynamic converter as discussed in the noted specification paragraphs, must be stored in some electronic data storage form. Such data can be stored in a table or a performance matrix or even in graphical form, relative to a known predetermined operation range of the torque converter. Given the original claim language from claim 3 which specifically recites, "...in the electronic control unit a performance matrix of the torque converter is stored. It is the Applicant's position that it is readily apparent that the "performance matrix" as recited in the Applicant's claims, stores the performance characteristic values of the hydrodynamic converter as expressed in the noted specification paragraphs.

In order to clarify this aspect of the Applicant's specification the Applicant has amended paragraph 021 to include the subject matter of the "performance matrix" from originally filed claim 3 in the appropriate specification section. As the Examiner is aware, the claims are

TEXT-000000

10/771,720

considered part of the originally filed specification and thus no new matter is believed entered by the noted specification amendment. Whereas the term "performance matrix" was introduced in the originally filed specification in claim 3, the Applicant contends there is no new subject matter being added; only a clarification of the relative structural and functional elements of the present invention.

Claims 11-20 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for the reasons noted in the official action. The rejected claims are accordingly amended, by the above claim amendments, and the presently pending claims are now believed to particularly point out and distinctly claim the subject matter regarded as the invention, thereby overcoming all of the raised § 112, second paragraph, rejections.

Claims 11, 12, 14-18 and 20 are rejected, under 35 U.S.C. § 102(b), as being anticipated by Olson et al. H964. The Applicant acknowledges and respectfully traverses the raised anticipatory rejection in view of the following remarks.

As the Examiner is aware, in order to properly support an anticipation rejection under 35 U.S.C. § 102(b), the applied reference must teach, suggest or disclose every feature of the Applicant's claimed invention. The Applicant points out that the subject matter of claim 13 has been incorporated into claim 11. Again, with respect to the § 112, first paragraph, rejection of claim 13, the subject matter of the "performance matrix" has been accordingly clarified with the recitation of "...a performance matrix containing characteristic hydrodynamic torque converter values of the torque converter. . .". Because such a feature is believed to be fully supported by the specification disclosure and because this feature of the present invention is not disclosed taught or even suggested by the cited reference, the Applicant respectfully requests withdrawal of the anticipation rejection.

In addition, new claim 21 has been added to write the subject matter of claims 11 and 13 in a form more uniform with U.S. claim writing format. Further, claim 30 has been added and includes the subject matter of claims 11, 13, 15 and 16. Besides, the feature of the "performance matrix", the Applicant has made a thorough study of the applied Olsen et al. H964

1/7/2005 4:51 PM

- 7 -

10/771,720

reference and cannot find any disclosure, teaching or suggestion relative to the further recited features of claim 31,

wherein the pump impeller wheel (2) has an inner axial extension (11) axially depending from the pump impeller wheel (2), the axial extension (11) having an axial end defining cams enabling the rotation speed of the pump impeller wheel (2) to be detected, and the cams are arranged on the axial end of the flange parallel to a rotation axis of the torque converter.

The Examiner alleges that "[t]he teeth on pickup ring 104 constitute cams in the sense as in the instant invention. . .", however while element 104 in the Olsen reference is arguably a toothed speed pick-up ring, it is part of, or attached to the output shaft 96 from the torque converter 20. The toothed speed pick-up ring 104 is not an axial extension of the pump impeller wheel as specifically recited in claims 15, 16 and 30.

In fact, such an axial extension of the pump impeller wheel as in the Applicant's invention is taught specifically away from by Olsen et al H944. Explaining the difference of their invention from the prior art as discussed at column 1, lines 50-60, Olsen et al. states,

. . . it is undesirable to add a tubular extension to the body of the impeller element in order to obtain a more accessible external speed pick-up point, because it would add unnecessary size and cost to the drive line. Accordingly, what is desired is a rugged speed sensor apparatus for measuring the rotational speed and the direction of rotation of a relatively entrenched or inaccessible element of a mechanism such as a hydrodynamic torque converter without increasing the physical size thereof.

Again in the Disclosure of the Invention, at column 2, lines 42-45 Olsen et al. continues to teach away from the presently claimed invention explaining with regards to the bladed impeller element: "[t]he instant speed sensor apparatus does not require tubular extension or external teeth on the rotating element to be measured. . . . Therefore, the Applicant believes that the applied reference fails to disclose, teach or even suggest the Applicant's claimed feature of ". . . an inner axial extension (11) axially depending from the pump impeller wheel (2), the axial extension (11) having an axial end defining cams enabling the rotation speed of the

7/23/2005 PM

10/771,720

pump impeller wheel (2) to be detected, and the cams are arranged on the axial end of the flange parallel to a rotation axis of the torque converter." In fact, the noted disclosure of Olsen et al. H946 is believed to teach specifically away from the Applicant's specifically claimed structure as recited in claims 15, 16 and 31.

Claim 19 is rejected, under 35 U.S.C. § 103(a), as being unpatentable over Olson et al. H964. The Applicant acknowledges and respectfully traverses the raised obviousness rejection in view of the following remarks. Claim 19 is dependent upon claim 11 which is now believed allowable in view of the above amendments and remarks and, therefore, claim 19 is thus also believed to be allowable. In regards to the rejection of claim 19 the Applicant would also like to address the Examiner's contention that "[t]o return to the prior arrangement and eliminate the Olson et al. improvement would have been considered obvious within the meaning of 35 USC § 103.

As best the Applicant understands this argument, if one of skill in the art would ignore the teachings of Olson et al, the Applicant's claim 19 would be obvious. As the Examiner is aware, a reference must provide some teaching or suggestion which would motivate one of skill in the art to achieve the presently claimed invention. Olson expressly states that "it is undesirable to add a tubular extension to the body of the impeller element in order to obtain a more accessible external speed pick-up point, because it would add unnecessary size and cost to the drive line." Column 1, lines 51 - 54. Therefore Olson could not obviate claim 19 because it explicitly teaches away from the use of such a structure. "The mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination." In re Mills, 916 F.2d 680 16 USPQ2d 1430 (Fed.Cir.1990). It is the Applicant's position that disclosure teaching explicitly away from some known reference does not provide the requisite suggestion or motivation required by case law to render the Applicant's claim 19 obvious.

If any further amendment to this application is believed necessary to advance prosecution and place this case in allowable form, the Examiner is courteously solicited to contact the undersigned representative of the Applicant to discuss the same.

1/105-445 PM

- 9 -

10/771,720

In view of the above amendments and remarks, it is respectfully submitted that all of the raised rejections should be withdrawn at this time. If the Examiner disagrees with the Applicant's view concerning the withdrawal of the outstanding rejections or applicability of the Olson et al. 'H964 reference, the Applicant respectfully requests the Examiner to indicate the specific passage or passages, or the drawing or drawings, which contain the necessary teaching, suggestion and/or disclosure required by case law. As such teaching, suggestion and/or disclosure is not present in the applied references, the raised rejection should be withdrawn at this time. Alternatively, if the Examiner is relying on his/her expertise in this field, the Applicant respectfully requests the Examiner to enter an affidavit substantiating the Examiner's position so that suitable contradictory evidence can be entered in this case by the Applicant.

In view of the foregoing, it is respectfully submitted that the raised rejection(s) should be withdrawn and this application is now placed in a condition for allowance. Action to that end, in the form of an early Notice of Allowance, is courteously solicited by the Applicant at this time.

The Applicant respectfully requests that any outstanding objection(s) or requirement(s), as to the form of this application, be held in abeyance until allowable subject matter is indicated for this case.

In the event that there are any fee deficiencies or additional fees are payable, please charge the same or credit any overpayment to our Deposit Account (Account No. 04-0213).

Respectfully submitted,



Scott A. Daniels, Reg. No. 42,462  
Customer No. 020210  
Davis & Bujold, P.L.L.C.  
Fourth Floor  
500 North Commercial Street  
Manchester, NH 03101-1151  
Telephone 603-624-9220  
Facsimile 603-624-9229  
E-mail: patent@davisandbujold.com

7/7/05 4:51:50 PM

- 10 -